ABSTRACT

A honeycomb structure comprising porous partition walls disposed so as to form a plurality of cells extending in an axial direction. In the honeycomb structure, defining that a porosity and pore diameter of the partition walls in a central portion is (Pi) and (Di), a porosity and pore diameter of the partition walls in an outer peripheral portion is (Po) and (Do), (Pi) and (Po) have a relation of (Pi < Po); or (Pi) and (Po) have a relation of (Pi > Po) and (Di) and (Do) have a relation of (Di < Do).